

**EXAMINING THE PRODUCTIVITY CONSTRAINTS IN THE
LIBYAN CONSTRUCTION COMPANIES**

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PENILAIAN KE ATAS PRODUKTIVITI SYARIKAT PEMBINAAN DI LYBIA

ABSTRAK

Bagi meningkat produktiviti dalam pembinaan adalah satu perkara yang mustahil untuk dicapai tanpa mengenalpasti faktor-faktor yang mempengaruhi produktiviti terlebih dahulu. Kajian terdahulu yang dijalankan ke atas produktiviti menunjukkan pelbagai faktor yang mempengaruhi produktiviti. Faktor-faktor yang mempengaruhi produktiviti boleh dibahagikan kepada tiga: industri, syarikat dan projek. Beberapa faktor yang mempengaruhi produktiviti di peringkat industri termasuklah campur tangan kerajaan, bebanan peraturan, kesatuan tempatan dan politik. Faktor-faktor yang berkaitan dengan buruh memberi kesan kepada kemajuan projek dan termasuklah motivasi, pengalaman, kemahiran dan latihan. Beberapa faktor di peringkat syarikat yang mempengaruhi produktiviti adalah berkaitan dengan pengurusan, termasuklah perancangan dan hala tuju projek. Produktiviti merupakan salah satu faktor paling penting yang memberi kesan kepada prestasi keseluruhan sesebuah organisasi sama ada kecil atau pun besar. Di peringkat mikro, peningkatan produktiviti dapat menurunkan unit kos dan bertindak sebagai petunjuk prestasi projek. Di peringkat makro, peningkatan produktiviti merupakan alat yang penting untuk menangani kesan-kesan inflasi dan menentukan kelancaran polisi. Peningkatan produktiviti merupakan satu cara asas untuk menyelesaikan masalah ekonomi. Modal sahaja adalah tidak mencukupi untuk menghasilkan lebih banyak kekayaan atau untuk memulakan perniagaan di negara-negara membangun. Peningkatan produktiviti adalah diperlukan, sekiranya kesemua input pengeluaran yang baik digunakan, peningkatan modal dan peningkatan produktiviti

berlaku seiring dengan pengeluaran. Peningkatan produktiviti meningkatkan pelaburan tanpa adanya sebarang beban kepada kerajaan. Kajian ini bertujuan untuk mengkaji keadaan produktiviti dalam syarikat-syarikat pembinaan di bandar Ajdabiya yang terletak di kawasan utara tengah Lybia. Selain itu, ia bertujuan untuk mencadangkan suatu strategi yang boleh meningkatkan produktiviti dalam syarikat-syarikat pembinaan. Soal selidik dijalankan untuk mengumpul data dari pihak pengurus projek, eksekutif dan pengurus yang bekerja di syarikat pembinaan. Sebanyak 203 borang soal selidik telah diedarkan kepada responden yang dipilih, hanya 149 telah diisi dan dikembalikan dan menghasilkan sebanyak 73.4% kadar respon. Hampir kesemua syarikat-syarikat menggunakan 36 faktor yang mempengaruhi produktiviti dalam kajian ini. Lukisan dan pengubahan spesifikasi semasa pelaksanaan, kekurangan pengalaman kerja, kekurangan bahan, kerja semula, dan ketidakhadiran penyelia merupakan faktor-faktor yang sangat menjejaskan produktiviti dalam syarikat-syarikat pembinaan. Jika faktor-faktor ini diambil dengan serius, maka tahap prestasi dan produktiviti pasti akan menunjukkan hasil yang positif dan menggalakkan terhadap kemajuan di dalam syarikat-syarikat ini. Strategi untuk meningkatkan produktiviti dalam syarikat-syarikat pembinaan di Ajdabiya telah dicadangkan dalam kajian ini. Beberapa cadangan untuk membantu meningkatkan tahap produktiviti dalam industri pembinaan Libya juga diketengahkan. Saranan-saranan ini termasuk menggalakkan lebih banyak latihan organisasi bagi penyelia peringkat rendah yang bertanggungjawab secara langsung terhadap orang-orang yang mengendalikan alat, menyediakan latihan, bimbingan penyelia barisan hadapan, dan meningkatkan fasa perancangan projek, termasuk organisasi, pembahagian tanggungjawab yang jelas, dan mengenal pasti skop kerja untuk semua pihak yang terlibat. Cadangan lain adalah

menguruskannya aktivitas-aktivitas pembinaan dengan urutan yang betul, contohnya, ketepatan perolehan peralatan dan bahan-bahan dan perancangan yang betul, dan menyediakan sumber-sumber yang mencukupi di lokasi bagi memudahkan penyelarasan oleh kontraktor.

EXAMINING THE PRODUCTIVITY IN THE LIBYAN CONSTRUCTION COMPANIES

ABSTRACT

Improving construction productivity is impossible without identifying the factors that influence productivity. Previous studies on productivity indicate that a broad range of factors affect productivity. These factors may be divided into three levels: industry, company, and project. Some of the productivity factors at the industry level include governmental interference, regulation burdens, local unions, and politics. Labor-related factors affect the project level and include motivation, experience, skill, and training. Some of the factors at the company level are management-related, including planning and project direction. Productivity is one of the most important factors that affect the overall performance of any organization, large or small. At the micro-level, improved productivity decreases unit costs and serves as an indicator of project performance. At the macro-level, improved productivity is a vital tool to counter inflationary effects and determine wage policies. Improved productivity is always counted among the basic means of solving economic problems. Capital alone is increasingly recognized as an inadequate means of producing more wealth or for starting a business in developing countries. Improved productivity is also required; if all production inputs are well utilized, capital improvements and enhanced productivity go hand in hand. Increased productivity enhances investments without any burden to governments. This research aims to examine the productivity constraints in the construction companies in the city of Ajdabiya, which is located in the central northern area of Libya. Moreover, it aims to

propose any strategies that can improve productivity in construction companies. A questionnaire survey was used to collect data from project managers, executives, and managers who are working in construction companies. Of the 203 questionnaires dispatched to the selected respondents, only 149 were completed and returned, yielding a response rate of 73.4%. Almost all companies used the 36 factors used in the survey. Drawings and specification alteration during execution, lack of labor experience, material shortage, rework, and supervisors' absenteeism are the factors which strongly affect productivity in the construction companies. If these factors are taken seriously, then the performance and productivity level will definitely show positive results and encourage progress in these companies. Strategies to improve productivity in the construction companies in Ajdabiya are proposed in this research. Several recommendations to help increase the productivity level in the Libyan construction industry are provided. These recommendations include encouraging more organizational training for lower-level supervisors who are directly responsible for the people who are handling the tools, providing training, mentoring front-line supervisors, and improving the project planning phase, including organization, clear division of responsibilities, and identifying the scope of work for all parties involved. Other recommendations are managing construction activities with proper sequencing, e.g., timely equipment arrival and material and proper planning, and providing sufficient resources on-site to coordinate contractors.

